

Exhibit B

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

1

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

-----x

SMITH KLINE & FRENCH LABORATORIES, :

LIMITED and SMITHKLINE BEECHAM :

CORPORATION d/b/a GLAXOSMITHKLINE, : Civil Action

:

Plaintiffs, : No. 05-197

:

vs.

:THIS TRANSCRIPT CONTAINS

TEVA PHARMACEUTICALS USA, INC., :CONFIDENTIAL MATERIAL THAT

:IS SUBJECT TO PROTECTIVE

Defendant. :ORDER

-----x

Washington, D.C.

Thursday, May 25, 2006

Videotaped Deposition of CAROL A. HARVEY,
PH.D., a witness herein, called for examination by
counsel for Defendant in the above-entitled matter,
pursuant to notice, the witness being duly sworn by
KAREN YOUNG, a Notary Public in and for the District

Henderson Legal Services
(202) 220-4158

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

16

1 **A. Yes, I do.**

2 Q. I understand it's a broad question, but
3 can you give me your understanding of what
4 ropinirole is?

5 **A. Ropinirole is the generic name for a**
6 **compound which we called SK&F 101468-A.**

7 Q. 101468-A?

8 **A. Yes.**

9 Q. We'll probably spend some time on that
10 today.

11 **A. Okay.**

12 Q. But can you tell me generally what your
13 involvement, if any, was with respect to ropinirole
14 or SK 101468-A?

15 **A. I was the global project team leader for**
16 **101468 from late 1985 until some point in 1988.**

17 Q. And do you have an understanding of -- SK
18 101468-A is a compound. Is that true?

19 **A. That's correct.**

20 Q. Do you have an understanding of what type
21 of compound it is? Is there a name for that that
22 you would use?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

42

1 **A. Yes.**

2 Q. When was your first -- the best of your
3 recollection, when was your first involvement with
4 compound 101468-A?

5 **A. When it transferred from development in**
6 **Philadelphia to development in Welwyn.**

7 Q. And you were in Welwyn?

8 **A. I was in Welwyn.**

9 Q. And do you recall approximately when that
10 was?

11 **A. It was in October 1985.**

12 Q. Is it fair to say you had not heard of
13 101468-A prior to the transfer in October 1985?

14 **A. I don't remember hearing of it before**
15 **that.**

16 Q. Do you know why it was transferred?

17 **A. We were told there were insufficient**
18 **resources to develop the product in Philadelphia and**
19 **spare capacity in Welwyn.**

20 Q. Who's the we? You said we were told.
21 Who's the we?

22 **A. The project team that took over**

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

May 25, 2006

Washington, DC

43

1 **responsibility.**

2 Q. And how did this project team come about?
3 Do you know?

4 A. In terms of the actual formation of the
5 team?

6 Q. Yeah.

7 A. I was appointed by the head of R and D at
8 the Frythe. It was the name of the site in Welwyn.
9 Individual team members were recommended by their
10 respective department heads.

11 Q. Who was the head of the R and D at the
12 Frythe?

13 A. Dr. Roger Brimblecombe.

14 Q. Brimble?

15 A. Combe.

16 Q. And he made you head of the project team?

17 A. He did.

18 Q. And the individual departments then
19 provided representatives? Is that the case?

20 A. That's true, yeah.

21 Q. Do you recall approximately how big the
22 project team was?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

May 25, 2006

Washington, DC

45

1 Q. Do you recall any specific instruction as
2 to what you would do with the compound when you were
3 made head of the project team at the Frythe?

4 A. **Specific instructions in what regard?**

5 Q. When the compound was transferred to you,
6 it was a cardiovascular agent; isn't that correct?

7 A. **That's correct.**

8 Q. Were there any other indications of use
9 that were being investigated?

10 A. **Not at that time, no.**

11 Q. Were your instructions when you received
12 responsibility for the project to develop this as a
13 cardiovascular agent?

14 A. **Our assumption at the time was that we**
15 **would continue to develop it for the indications**
16 **that had been identified.**

17 Q. And those were --

18 A. **Hypertension and angina.**

19 Q. Did there come a time that you
20 investigated other indications for that compound?

21 A. **Yes, there did.**

22 Q. When was that?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

46

1 **A. That was in 1986-'87.**

2 Q. How did that come about?

3 **A. We discovered additional properties of the**
4 **drug during the course of its evaluation.**

5 Q. Can you describe those circumstances?

6 **A. In pharmacology studies, looking at the**
7 **cardiovascular effects of the drug, CNS effects were**
8 **also seen.**

9 Q. How did that happen?

10 MR. McELWAIN: Object to the form of the
11 question. You can answer.

12 **A. Yes, I'm not sure how to answer that.**

13 Q. Okay. There were pharmacology studies for
14 cardiovascular, correct?

15 **A. Correct.**

16 Q. And as a result of those pharmacology
17 studies for cardiovascular, you somehow found
18 central nervous system effects. Is that the case?

19 **A. That's the case.**

20 Q. What were the central nervous effects that
21 you -- central nervous system effects that you found
22 as a result of those pharmacological studies?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

47

1 A. I did not observe the effects personally,
2 but they were described to me as behavioral and
3 motor effects.

4 Q. Who described them to you?

5 A. Initially they were described to me by
6 Roger Eden.

7 Q. Did there come a time that somebody else
8 described them to you?

9 A. They were subsequently described to me by
10 David Owen.

11 Q. And anybody else?

12 A. Not that I recall.

13 Q. Who did the studies?

14 A. A technician in the pharmacology
15 department at the time.

16 Q. Who's that?

17 A. I understand it was Annette Wright.

18 Q. What's the basis of your understanding?

19 A. I believe I was told that.

20 Q. By who?

21 A. During the course of the preparation.

22 Q. Your attorneys?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

48

1 **A. I'm sorry?**

2 O. Your attorneys.

3 **A. Yes.**

4 Q. What studies was Annette Wright doing as a
5 technician that resulted in observation of CNS
6 effects?

7 MR. McELWAIN: I'll object. These are
8 really questions for your recollection.

9 THE WITNESS: Okay.

10 MR. McELWAIN: And if you have a
11 recollection, give that, but you shouldn't in your
12 answer reveal conversations between us.

13 THE WITNESS: Okay. My recollection is
14 that she was looking at blood pressure effects in
15 conscious rats.

16 BY MR. DONOVAN:

17 Q. And is your recollection based on your
18 discussions with counsel in connection with
19 preparing for this deposition?

20 **A. No, it's not.**

21 Q. Okay. And what is your recollection based
22 on?

Henderson Legal Services
(202) 220-4158

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

49

1 **A. My recollection is based on the report of**
2 **the behavioral effects to me by Roger Eden.**

3 Q. Do you recall specifically what tests were
4 being done for these blood pressure effects on
5 conscious rats with any more specificity?

6 **A. No, I don't.**

7 Q. So people on the project team were
8 conducting pharmacology studies for cardiovascular,
9 including blood pressure effects in conscious rats,
10 and as a result of those studies, they saw certain
11 CNS effects? Is that the case?

12 **A. That's the case.**

13 Q. Anyone seen any CNS effects with respect
14 to ropinirole prior to that time?

15 **A. Not to my knowledge.**

16 Q. And those tests were done by Ms. Wright,
17 is that correct, based on your knowledge?

18 **A. I understand that was the name of the**
19 **technician, yes.**

20 Q. And that was done at the direction of
21 Dr. Eden? Is that the case?

22 **A. That's the case.**

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

50

1 Q. And that is based on a document that you
2 saw, correct? Your understanding.

3 MR. McELWAIN: Object.

4 A. No, it's not my understanding.

5 Q. I'm looking for the basis of your
6 understanding of these circumstances. Could you
7 provide that for me please?

8 A. The basis would be my conversation with
9 Mr. Eden.

10 Q. And was that at or around the time that
11 these tests took place?

12 A. Were conducted, yes.

13 Q. And what did Mr. Eden say to you to the
14 best of your recollection?

15 A. He told me that they had seen CNS effects
16 at the same doses that they were looking at for
17 cardiovascular effects.

18 Q. And these CNS effects were behavioral and
19 motor effects?

20 A. Correct.

21 Q. Can you describe in any more specificity
22 what these behavioral and motor effects would be?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

May 25, 2006

Washington, DC

51

1 **A. No, I'm sorry, I don't recall.**

2 Q. Do you know -- can you think of somewhere
3 where this would be memorialized in a document?

4 **A. I'm sure it's memorialized in many**
5 **documents.**

6 Q. Can you think of any off the top of your
7 head where you would expect to find this?

8 **A. The studies would have been written up and**
9 **reported in PRA reports.**

10 Q. What's a PRA report?

11 **A. Yeah.**

12 Q. What is a PRA report?

13 **A. Oh, it's a report of studies that would**
14 **have been useful in preparing for any kind of**
15 **clinical or regulatory application.**

16 Q. These are regular reports that were
17 generated by your team; is that right?

18 **A. Yes.**

19 Q. And they're dated, correct?

20 **A. They're dated.**

21 Q. What happened next in connection with
22 investigating potential other indications of use for

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

62

1 Q. Do you know if they were done
2 concurrently, the in-house and external?

3 A. No, my recollection is that the in-house
4 were done first.

5 Q. And was it a result of the in-house that
6 there was a determination to go to the external
7 investigators?

8 A. Yes.

9 Q. Who made that determination?

10 A. That was Dr. David Owen.

11 Q. And why did he do that?

12 A. He felt that the compound might have
13 potential in other areas and should be more fully
14 evaluated.

15 Q. Potential in what areas?

16 A. Specifically in Parkinson's disease.

17 Q. Why did he think that?

18 A. From his observations in the animals and
19 his knowledge of the area.

20 Q. And what's your basis of that
21 understanding?

22 A. My conversations with him.

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

79

1 budget is; is that correct?

2 **A. I have no idea what the budget was, no.**

3 Q. Got to ask. Okay. So there came a time
4 that additional studies specifically related to
5 Parkinson's were requested from Bradford, correct?

6 **A. Correct.**

7 Q. And did they do those studies?

8 **A. They did.**

9 Q. Do you know how long those studies took?

10 **A. Approximately six months.**

11 Q. Were there results from the studies?

12 **A. There were results from the studies.**

13 Q. Were the results memorialized?

14 **A. I think it's reasonable to think that they**
15 **were.**

16 Q. Were the studies themselves memorialized
17 in any fashion?

18 **A. There should have been a report produced.**

19 Q. Report from Bradford to --

20 **A. A report from Bradford submitted to Smith**
21 **Kline & French.**

22 Q. What were the results?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

May 25, 2006

Washington, DC

80

1 **A. I don't recall specifics.**

2 Q. Do you recall anything general about the
3 results?

4 **A. They substantiated earlier studies and**
5 **provided further confirmation of the potential**
6 **utility of the drug.**

7 Q. Potential utility of the drug for
8 Parkinson's?

9 **A. For Parkinson's.**

10 Q. But it's fair to say that at least at the
11 conclusion of this study, it was still not clear
12 that 101468 would be -- would have utility as a drug
13 for treating Parkinson's. Is that true?

14 MR. McELWAIN: Objection. You can answer
15 if you --

16 THE WITNESS: I can answer?

17 MR. McELWAIN: Uh-huh.

18 THE WITNESS: At that stage of the
19 development, I think that would be, you know, an
20 extrapolation.

21 BY MR. DONOVAN:

22 Q. Didn't have enough information yet to make

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

141

1 in October of 1985?

2 **A. Yes, that's correct.**

3 Q. Or after that meeting then, work would
4 have started at Welwyn.

5 **A. Yes.**

6 Q. But the first team meeting would have
7 occurred in December, as memorialized in that
8 document we saw a minute ago.

9 **A. Yes.**

10 Q. Dr. Harvey, let me show you what I've
11 marked as -- for identification as Defendant's
12 Exhibit 71.

13 **A. Thank you.**

14 Q. Dr. Harvey, do you recognize Defendant's
15 Exhibit 71?

16 **A. I recognize it as a report, yes.**

17 Q. You'll see on the distribution on the
18 first page of 71 that you were apparently provided a
19 copy of this, correct?

20 **A. Correct.**

21 Q. And this is a report; is that right?

22 **A. This is a report.**

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

142

1 Q. And do you know what the report is about?

2 A. A preliminary investigation into the CNS
3 penetrated by the 101468.

4 Q. And do you know who prepared this report?

5 A. It was prepared by Ann Lewis.

6 Q. And who's Ann Lewis?

7 A. She was the study director and she was in
8 the department of drug metabolism and
9 pharmacokinetics at the time.

10 Q. And was that at Welwyn?

11 A. That was at Welwyn.

12 Q. And do you know the date that this report
13 was prepared?

14 A. I cannot tell that from -- I can tell when
15 it was distributed.

16 Q. When was it distributed?

17 A. In March of 1986.

18 Q. And is that from Mr. Richardson's
19 signature?

20 A. G. Richardson Jones, yes.

21 Q. Is it your understanding this report was
22 prepared then as a result of work done at Welwyn?

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

143

1 **A. At Welwyn, yes. That would be my**
2 **understanding.**

3 Q. And if we turn to the second page of
4 Exhibit 71 --

5 **A. Actually, may I correct something?**

6 Q. Sure.

7 **A. This is not a report.**

8 Q. Okay.

9 **A. This is a protocol.**

10 Q. Okay.

11 **A. So this is an intent to conduct a study,**
12 **not the result of the actual study.**

13 Q. So this is a -- Exhibit 71 is a protocol?

14 **A. It's a protocol.**

15 Q. And it was a protocol prepared by Dr. Ann
16 Lewis, correct?

17 **A. Correct.**

18 Q. And the protocol is providing a study or a
19 report or a study that Dr. Lewis would understand.
20 Is that --

21 **A. Yeah, it outlines the details of the study**
22 **she is proposing to conduct, yes.**

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

144

1 Q. Do you have a recollection of this study
2 that she's --

3 A. Not specifically, no.

4 Q. And you would be copied here as a result
5 of your participation as team leader? Is that the
6 case?

7 A. That would typically be the case.

8 Q. And Dr. Lewis -- I'm sorry, she's in
9 pharmacokinetics; is that right?

10 A. She would be in drug metabolism and
11 pharmacokinetics, yes.

12 Q. And if we turn to the second page please
13 of Exhibit 71, do you see an introduction?

14 A. I do.

15 Q. And it says, "SKF 101468 is currently
16 under development at the Frythe as an orally active
17 prejunctional dopaminergic D2 agonist which may be
18 of value in the treatment of angina and hypertension
19 in man." Do you see that?

20 A. I do.

21 Q. And then we go to the next sentence says,
22 "Results from initial high-dose toxicity studies

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

145

1 suggest that the compound may have pronounced
2 central effects." Do you see that?

3 **A. I do.**

4 Q. Do you know anything about those initial
5 high-dose toxicity studies that are referenced here?

6 **A. I don't specifically remember them.**

7 Q. Do you know if those initial high-dose
8 toxicity studies were done at Welwyn?

9 **A. They may have been done at Welwyn. They**
10 **may have been done in Philadelphia. I do not**
11 **recall.**

12 Q. Do you know who did those initial
13 high-dose toxicity studies?

14 **A. No, I'm afraid I don't.**

15 Q. Does this refresh your recollection as to
16 when your team first learned of the CNS effects from
17 administration of 101468?

18 **A. No, this does not alter my original**
19 **comments.**

20 Q. Why's that?

21 **A. The results of a high-dose toxicity study**
22 **would not necessarily be relevant in considering the**

Harvey, Ph.D., Carol A. CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
Washington, DC

May 25, 2006

146

1 **effects of a drug at more normal therapeutic doses.**

2 Q. It goes on to say, "The purpose of the
3 study outlined in this protocol is to investigate
4 the CNS penetration of intravenously administered
5 101468 and related material at a steady state in a
6 conscious male rat at a dose of two milligrams per
7 kilogram," correct?

8 **A. Correct.**

9 Q. You would agree with me that at least at
10 this point, your team would have the understanding
11 that 101468 would penetrate the central nervous
12 system, correct?

13 MR. McELWAIN: Objection.

14 **A. The understanding would be that at**
15 **excessively high doses, it might penetrate the**
16 **central nervous system, yes.**

17 Q. And in fact, is that what two milligrams
18 per kilogram is, an excessively high dose?

19 **A. I do not recall the dose range, but that**
20 **would seem not to be an excessively high dose.**

21 Q. But it's your understanding that the high-
22 dose toxicity studies would be at an excessively